

REMARKS

Claims 1, 3-7 and 9-14 are pending and under consideration in the above-identified application. Claims 2 and 8 were previously canceled without prejudice.

In the office actions of July 11, 2006, Claims 1, 3-7 and 9-14 were rejected.

In response, claims 4 and 10 have been amended. Accordingly, claims 1, 3-7 and 9-14 remain at issue.

I. 35 U.S.C. § 112 Indefiniteness Rejection of Claims

Claims 4 and 10 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner asserted that the term “the lowest transmission rate” is unclear as to what this term refers to.

Applicants have amended claims 4 and 10 to correct for the informality noted by the Examiner and request that this rejection be withdrawn.

II. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 1, 3, 5, 7, 9 and 11 were rejected under 35 U.S.C. § 103(a) as being purportedly obvious in view of *Imatsuka* (JP 2002095051) and *Seppanen* (US 6,330,442). Applicant respectfully traverses this rejection.

In the Office Action, the Examiner asserted that *Imatsuka* teaches the claim 1 limitations (and similar claim 7 limitations) of “*detecting, via the second part of the phone, a signal transmitted by the reader/writer to start the second radio communication with the reader/writer;*

and in response to detecting the signal transmitted by the reader/writer to start the second radio communication with said reader/writer, temporarily stopping output of transmission data in the first radio communication with said predetermined station such that the second radio communication is inhibited from causing interference in the first radio communication. In addition, the Examiner asserts that Applicant's statements in the previous amendment mailed 02/10/2006 supports the Examiner's contention that *Imatsuka* teaches these claim 1 limitations.

Applicant respectfully disagrees with the Examiner's assertions and submits that the Examiner has mischaracterized the teachings of *Imatsuka* and Applicant's previous statements.

Imatsuka discloses a portable telephone M that may be used to transfer through an automatic ticket gate 2 that has a reader/writer 42. *Imatsuka* further discloses that the single control circuit 20 of the portable telephone M may be on a call to another person (i.e., "the partner under present message" which may, *arguendo*, be a first radio communication) when the portable telephone M approaches the reader/writer 42 in the automatic ticket gate 2 and an "inquiry signal" from the reader/writer 42 of the automatic ticket gate 2 is detected by the control circuit 20 of the portable telephone M. *See Imatsuka*, paragraphs [0039]-[0040], [0045]-[0046]; Fig. 6. *Imatsuka* teaches that the "inquiry signal" is transmitted by the reader/writer 42 to the portable phone M to start communication (i.e., a second radio communication) with the portable telephone M. However, rather than temporarily stopping output of transmission data in the first radio communication with the partner on the call "in response to detecting the [inquiry] signal transmitted by the reader/writer to start the second radio communication with the reader/writer," *Imatsuka* discloses that the portable telephone M communicates an ID number to the automatic

ticket gate 2 and, in turn, the automatic ticket gate 2 communicates a station code and time code to the control circuit 20 of the portable telephone M **before** the control circuit ever interrupts the call or first radio communication with the other person. *See Imatsuka*, paragraphs [0041]-[0046]; Fig. 6. Thus, *Imatsuka* teaches that when an initial inquiry (e.g., a signal to start communication) is received by the control circuit 20 from the reader/writer 42, the control circuit 20 does not interrupt but allows the call to the partner to continue while the control circuit 20 transmits data (e.g., ID number) to the reader/writer and the reader/writer transmits data (e.g., station code and time code) to the control circuit 20 of the portable telephone M.

This simultaneous transmission often causes interference or jamming, which is the problem discussed by the Applicant in the present Application (See, Application at pg. 3 lines 5-13). Furthermore, the Applicant discloses that even where the frequency bandwidth of the two radio signals is different, “harmonics of the radio signal transmitted between the [phone] and the reader/writer will most likely be a jamming wave against the radio signal used in the [phone]” for a call. *Id.*

Moreover, although *Imatsuka* discloses that the control circuit 20 subsequently interrupts the call to the partner, it is not to prevent interference from any communication between the telephone M and the reader/writer as evident from *Imatsuka* teaching that ID number, station code, and time code be transmitted between the telephone M and the reader/writer 42 while a call from the telephone M to the partner is taking place. Instead, *Imatsuka* discloses that the control circuit 20 subsequently interrupts the call to the partner for the purpose of preventing accounting

charges from applying to the call while the caller is attempting to transfer through the automatic ticket gate 2. See *Imatsuka*, paragraph [0053], Fig. 6.

Thus, *Imatsuka* teaches away from the Applicant's invention as claimed in claim 1 and 7. In particular, *Imatsuka* fails to teach (alone or in combination with *Seppanen* or any other cited reference) the limitation of, *"in response to detecting the signal transmitted by the reader/writer to start the second radio communication with said reader/writer, temporarily stopping output of transmission data in the first radio communication with said predetermined station such that the second radio communication is inhibited from causing interference in the first radio communication"* as taught and claimed by the Applicant.

Moreover, with respect to claim 7 and referring to Fig. 1 as an illustrative example, Applicant claims a radio communication unit comprising, among other limitations, *"a first radio communication processor [(e.g., 117)] operatively configured to generate a first bidirectional radio communication with a predetermined station, a second radio communication processor [(e.g., 122)] operatively configured to generate a second bidirectional radio communication with an adjacent reader/writer, and a controller [(e.g., 123)] operatively configured to detect a signal transmitted by the reader/writer for starting the second radio communication with the reader/writer and to temporarily stop output of transmission data in said first radio communication processor in response to detecting the signal such that the second radio communication is inhibited from causing interference in the first radio communication..."*

Imatsuka discloses a portable telephone M that has a single control unit 20 and a memory 21 storing one application accessed by the single control unit 20 when used as a "terminal

equipment [or cellular phone] with a station service system” and another application accessed by the same single control unit 20 for “short-distance radio function (Bluetooth)” communication with the reader/writer 42. See *Imatsuka*, paragraph [0023]-[0026], Fig. 3. *Imatsuka* fails to disclose or suggest each limitation of claim 7.

Accordingly, for the foregoing reasons, Applicant respectfully requests that the rejection to claims 1 and 7 be withdrawn.

Claims 3 and 5 depend from claim 1 and should be deemed allowable for at least the same reasons as claim 1. Claims 9 and 11 depend from claim 7 and should be deemed allowable for at least the same reasons as claim 7.

Moreover, with respect to dependent claims 3 and 9, the Examiner asserts that *Imatsuka* teaches the limitation of “temporarily stopping output of transmission data [in the first radio communication]” while “transmitting packets having control data associated with said first bidirectional radio communication even when no data is stored in said buffer.” In particular, the Examiner states that the “call is placed on hold, hence no data is stored and a control channel is left open between the portable device and the called party.” Applicant respectfully disagrees.

Applicant submits that *Imatsuka* discloses “[m]omentary interruption of the above-mentioned message is in the condition that the message function is suspended in the condition” as “connected [to] the circuit” and “resuming the message by which interruption was carried out” but fails to teach that “a control channel is left open” as asserted by the Examiner. Accordingly, Applicant submits that *Imatsuka* fails to disclose or suggest the limitations of claims 3 and 9.

Accordingly, Applicant respectfully requests that the rejection to dependent claims 3, 5, 9 and 11 be withdrawn for the reasons noted above.

Claims 4 and 10 were rejected under 35 U.S.C. §103(a) as being purportedly unpatentable over *Imatsuka* in view of *Seppanen* and in further view of *Seppanen* and *Harris et al.* (US 6,400,755).

Imatsuka, *Seppanen* and *Harris* still fail to teach all the limitations of independent claims 1 and 7 as discussed above. Claims 4 and 10 depend from claims 1 and 7 and should be deemed allowable for at least the same reasons as claims 1 and 7.

In addition, although Applicant disagrees with the rejection to claims 4 and 10, to further prosecution, Applicant has amended claims 4 and 10 to more clearly express one aspect of Applicant's invention. Claim 10 as amended requires "the packets [having control data] transmitted by said first radio communication processor when no data is stored in said [transmission data] buffer are transmitted at a lower transmission rate and a lower power level than when data is stored in said buffer." Claim 4 as amended has similar limitations. Applicant teaches that, by lowering the transmission power and rate of control data when the transmission of voice or user data is temporarily stopped, interference with communication to the reader/writer is suppressed to a minimal amount. (See Application, at pg. 13 line 26 - pg. 14 line 22; pg 23 lines 1-7). Applicant submit that neither *Imatsuka*, *Seppanen*, nor *Harris* (each alone or in combination with any other cited reference) disclose or suggest the claim 4 and 10 limitations as amended.

Accordingly, Applicant respectfully requests that the rejection to dependent claims 4 and 10 be withdrawn for the reasons noted above.

Claims 6 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Imatsuka* in view of *Seppanen*, further in view of *Vega et al.* (US 6,282,407).

Imatsuka, *Seppanen* and *Vega* still fail to teach all the limitations of independent claims 1 and 7 as discussed above. Claims 6 and 12 depend from claims 1 and 7 and should be deemed allowable for at least the same reasons as claims 1 and 7.

Accordingly, Applicant respectfully requests that the rejection to dependent claims 6 and 12 be withdrawn for the reasons noted above.

Claims 13 and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Imatsuka* in view of *Seppanen*, and further in view of *Chintada et al* (US 2002/0118639). Applicant traverses this rejection.

Imatsuka, *Seppanen* and *Chintada* still fail to teach all the limitations of independent claims 1 and 7 as discussed above. Claims 13 and 14 depend from claims 1 and 7 and should be deemed allowable for at least the same reasons as claims 1 and 7.

With respect to claims 13 and 14, the Examiner argues that *Chintada* teaches the limitation that “*the first part of the phone includes a software-hierarchy communication model having a data-link layer operatively configured to manage transmission data congestion when in a first mode and the step of temporarily stopping output of transmission data further comprises temporarily forcing the data-link layer into the first mode.*”

Applicant respectfully disagrees. *Chintada* discloses a wireless remote unit that includes a software-hierarchy communication model having a data-link layer (DLL) and a medium access control (MAC) layer that sends a control message (“BLOCK_IND”) to the DLL when the wireless remote unit is in a “congested state” so that the DDL transitions to a BLOCKED state so that the DLL will then “suspend the transmission of frames to the MAC layer.” See *Chintada*, para. [0046]. Thus, Applicant submits that *Chintada* does not teach forcing the DLL into the “BLOCKED state” (*arguendo* a “congestion” mode) but requests that the DDL transition to the “BLOCKED state” in response to a control message in accordance with the normal disclosed data congestion operation for the wireless remote unit.

Therefore, Applicant submits that *Chintada* (alone or in combination with any other cited reference) fails to teach that a “*data-link layer operatively configured to manage transmission data congestion when in a first mode*” and “*temporarily forcing the data-link layer into the first mode*” in order to temporarily stop the “*output of transmission data*” by “*stopping ... the inputting of transmission data into [the] buffer that temporarily stores the transmission data*” as required by claims 13 and 14.

Accordingly, Applicant respectfully requests that the rejection to dependent claims 13 and 14 be withdrawn for the reasons noted above.

III. Conclusion

In view of the above amendments and remarks, Applicant submits that claims 1, 3-7 and 9-14 are clearly allowable over the cited prior art, and respectfully requests early and favorable

notification to that effect. The Commissioner is hereby authorized to charge any additional fees which may be required, or to credit any overpayment to Account No. 19-3140.

Respectfully submitted,

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